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LAMPIRAN

LAMPIRAN 1 : Data Produksi, luas panen dan produktivitas Padi

a. Maros

Tahun	Produksi (Ton)	Luas Panen (Ha)	Produktivitas (Kwintal/Ha)
2001	206.995	39.401	52,53546864
2002	145.414	28.534	50,96165977
2003	158.720	31.023	51,16204107
2004	168.193	34.649	48,54194926
2005	169.293	34.194	49,50956308
2006	176.760	34.939	50,59103008
2007	202.718	38.145	53,14405558
2008	201.346	36.341	55,40463939
2009	218.135	41.785	52,2
2010	250.280	44.571	56,15311009
2011	258.581	43.339	59,66
2012	245.178	46.710	52,48931321
2013	249.659	48.042	51,96678974
2014	258.789	50.157	51,59578346
2015	351.169	64.202	54,69753046
2016	313.972	57.904	54,22287088
2017	272.950	56.357	48,43258964
2018	222.528	48.001	42,53
2019	205.050	43.635	46,9920935
2020	195.176	44.215	44,1421863

b. Pangkep

Tahun	Produksi (Ton)	Luas panen (Ha)	Produktivitas (Kwintal/Ha)
2001	106.933	20.449	52,29253264
2002	113.247	20.304	55,77570922
2003	94.993	17.988	52,80909495
2004	87.071	17.692	49,21489939
2005	87.944	17.740	49,57384442
2006	91.099	18.373	49,58308387
2007	117.344	20.740	56,57859209
2008	123.246	21.807	56,51671482
2009	129.607	22.783	56,88
2010	130.777	24.551	53,2675834
2011	119.664	24.058	49,74
2012	138.221	26.568	52,02521266
2013	144.797	29.185	49,61348001
2014	151.723	30.509	49,73045542
2015	152.564	29.948	50,94302789
2016	149.070	28.911	51,56128525
2017	141.530	31.421	45,04346836
2018	136.091	30.951	44,23
2019	120.903	26.183	46,17614483
2020	129.810	26.202	49,54160215

LAMPIRAN 2. Data Observasi, Model, Prediksi dan Prediktor

a. Maros

Produksi Padi (Ton)	Model	Prediksi	Suhu_SOND	Suhu_JFMA	CH_SOND	CH_JFMA	Monsun_SOND	Monsun_JFMA	ENSO_SOND	ENSO_JFMA	IOD_SOND	IOD_JFMA
206.995	180.298	228.092	27,44268817	27,19684836	504,335	750,8425	1,549	1,963425	-0,23855	-0,4826615	0,06132918	0,0954735
145.414	170.422	181.950	28,16427419	26,45964862	208,1075	485,0675	1,419	2,05575	1,2908925	0,10395595	0,46128185	0,029618
158.720	178.829	188.971	27,48556452	26,8816225	567,4275	673,075	0,707275	2,5645	0,4191055	0,59453565	0,2354693	0,0856778
168.193	198.226	177.364	28,06887097	26,98878661	432,8875	792,7925	1,65575	2,175	0,76871575	0,179735925	0,20501488	0,2150135
169.293	153.639	166.305	28,11645161	27,25141897	344,8475	462,2625	1,292	2,816	-0,2684712	0,42321325	-0,08160953	-0,082292
176.760	166.779	203.355	28,32795699	26,96828149	271,3	571,325	0,693815	2,65575	0,95688825	-0,60075625	0,72289475	0,005325
202.718	214.447	225.003	27,47669355	27,14233103	311,0325	517,525	0,71055	2,45855	-1,32487025	0,1813813	0,31712874	0,3231775
201.346	191.860	185.308	13,46209677	26,57232202	315,75	551,7125	0,828925	2,100225	-0,36522475	-1,30115975	0,2870455	0,1725704
218.135	208.111	240.539	13,51290323	10,00092166	240,075	601,575	1,38875	1,96125	1,3279645	-0,59013125	0,2981745	0,2809278
250.280	235.238	201.154	12,59247312	9,264919355	189,5	529,375	0,667675	2,66375	-1,5125	1,1365105	-0,04910742	0,4618128
258.581	252.912	270.819	15,58306452	11,59518049	125,5	94,9	1,367825	2,38725	-0,86446475	-1,0889245	0,49526585	0,4141608
245.178	232.883	284.891	14,79677419	10,55199296	109,275	193,125	0,94485	2,60875	0,30590825	-0,490152	0,48656875	0,1064883
249.659	245.648	272.912	15,48010753	9,444201229	95,25	183,75	0,58535	2,120475	-0,02080165	-0,177646475	0,26930925	0,1533033
258.789	271.384	245.276	15,4016129	12,33567588	22,1	123,75	0,93375	2,49525	0,72180825	-0,083564075	0,31652675	0,0759109
351.169	293.268	308.804	14,95268817	10,7297235	68,6	127,8	0,7122875	1,95375	2,4424025	0,71459875	0,6526065	0,0021656
313.972	322.722	290.082	15,26424731	10,69603263	97,85	143,425	1,1553	2,55625	-0,49955725	1,921525	-0,07112086	0,249218
272.950	281.721	222.163	14,60510753	10,98458141	102,825	105,525	0,912025	2,5185	-0,61003675	0,0308262	0,415936	0,3935679
222.528	242.714	254.345	16,76021505	10,76841398	36,35	159,325	1,1278	2,39725	0,8674335	-0,596099	0,828283	0,1288763
205.050	251.371	231.191	15,70860215	12,22436636	106,675	238,725	0,94688725	2,14545	0,56440325	0,73419075	1,03740025	0,497161
195.176	178.483	192.540	14,53682796	11,51368187	199,375	416,6	0,935975	2,3945	-0,8734735	0,571336	0,2877215	0,234543

b. Pangkep

Produksi Padi (Ton)	Model	Prediksi	Suhu_SOND	Suhu_JFMA	CH_SOND	CH_JFMA	Monsun_SOND	Monsun_JFMA	ENSO_SOND	ENSO_JFMA	IOD_SOND	IOD_JFMA
106.933	103.607	145.403	27,44268817	27,19367127	27,44268817	27,193671	1,549	1,963425	-0,23855	-0,4826615	0,06132918	0,0954735
113.247	98.797	140.593	28,16508065	26,46209485	28,16508065	26,462095	1,419	2,05575	1,2908925	0,10395595	0,46128185	0,029618
94.993	102.891	144.687	27,48556452	26,88254224	27,48556452	26,882542	0,707275	2,5645	0,4191055	0,59453565	0,2354693	0,08567783
87.071	112.337	154.133	28,0697043	26,99045514	28,0697043	26,990455	1,65575	2,175	0,76871575	0,179735925	0,20501488	0,2150135
87.944	90.624	132.420	28,11728495	27,25141897	28,11728495	27,251419	1,292	2,816	-0,2684712	0,42321325	-0,0816095	-0,0822924
91.099	97.023	138.819	28,32962366	26,96908794	28,32962366	26,969088	0,693815	2,65575	0,95688825	-0,60075625	0,72289475	0,00532503
117.344	120.236	162.032	27,47752688	27,14313748	27,47752688	27,143137	0,71055	2,45855	-1,32487025	0,1813813	0,31712874	0,3231775
123.246	109.237	151.033	29,29354839	26,57318409	29,29354839	26,573184	0,828925	2,100225	-0,36522475	-1,30115975	0,2870455	0,17257043
129.607	117.151	158.947	30,11102151	28,51641705	30,11102151	28,516417	1,38875	1,96125	1,3279645	-0,59013125	0,2981745	0,28092775
130.777	130.361	172.157	29,78655914	28,89270353	29,78655914	28,892704	0,667675	2,66375	-1,5125	1,1365105	-0,0491074	0,46181275
119.664	128.215	138.477	30,49569892	28,32476959	30,49569892	28,32477	1,367825	2,38725	-0,86446475	-1,0889245	0,49526585	0,41416075
138.221	144.882	116.007	31,06693548	29,33885799	31,06693548	29,338858	0,94485	2,60875	0,30590825	-0,490152	0,48656875	0,1064883
144.797	142.346	119.426	30,75188172	29,57945469	30,75188172	29,579455	0,58535	2,120475	-0,02080165	-0,177646475	0,26930925	0,15330325
151.723	146.538	113.774	31,32634409	28,98114439	31,32634409	28,981144	0,93375	2,49525	0,72180825	-0,083564075	0,31652675	0,07591088
152.564	150.533	108.388	33,94569892	31,16201997	33,94569892	31,16202	0,7122875	1,95375	2,4424025	0,71459875	0,6526065	0,0021656
149.070	137.150	126.431	33,53387097	32,61662032	33,53387097	32,61662	1,1553	2,55625	-0,49955725	1,921525	-0,0711209	0,249218
141.530	129.330	136.973	32,83494624	31,51639785	32,83494624	31,516398	0,912025	2,5185	-0,61003675	0,0308262	0,415936	0,3935679
136.091	143.669	117.642	33,29086022	30,9265169	33,29086022	30,926517	1,1278	2,39725	0,8674335	-0,596099	0,828283	0,12887625
120.903	123.719	144.539	32,37956989	31,18471582	32,37956989	31,184716	0,94688725	2,14545	0,56440325	0,73419075	1,03740025	0,497161
129.810	137.945	125.359	31,96021505	30,15003708	31,96021505	30,150037	0,935975	2,3945	-0,8734735	0,571336	0,2877215	0,234543

LAMPIRAN 3. Rincian data lokal Suhu dan Curah hujan

a. Data Suhu bulanan rata-rata di Maros

TAHUN	JAN	FEB	MAR	APR	MEI	JUN	JUL	AGU	SEP	OKT	NOV	DES
2001	26,74516	27,09286	27,20938	27,74	28,27	27,11	27,3871	27,87419	28,86	28,22581	26,73333	25,95161
2002	26,0871	26,13214	26,51935	27,1	27,58065	27,62667	27,35484	27,16129	28,35667	28,86129	28,31333	27,12581
2003	26,50645	26,68929	26,97742	27,35333	27,70968	27,28	26,69677	27,4129	27,9	28,42258	27,51	26,10968
2004	26,94194	26,1931	26,99677	27,82333	27,84516	27,18667	27,20968	26,82581	28,75333	28,57742	28,08667	26,85806
2005	26,82581	27,24643	27,39677	27,53667	28,09355	27,90667	27,6	28,13871	29,11667	28,65806	27,72333	26,96774
2006	26,68065	26,96786	26,96129	27,26333	27,75806	26,79333	27,0129	27,80968	28,35	28,70323	28,81667	27,44194
2007	27,23871	26,67857	27,33871	27,31333	27,88065	27,41333	27,39032	27,4	27,97	28,06774	27,24	26,62903
2008	26,64839	26,16897	26,64194	26,83	27,42903	27,25667	25,77419	26,45161	20,5	17,83871	9,8	5,709677
2009	4,387097	7,071429	11,64516	16,9	23,09677	23,33333	26,09677	27,54839	23	16,29032	10,6	4,16129
2010	4,16129	6,25	10,54839	16,1	19,19355	23,9	27,51613	25,35484	21	15,48387	10,46667	3,419355
2011	6,16129	9,178571	11,77419	19,26667	22,06452	23,33333	24,35484	26,74194	24,76667	16,96774	12,53333	8,064516
2012	6,225806	5,206897	15,74194	15,03333	20,64516	24,9	26,25806	27,06452	23	17,3871	12,8	6
2013	6,419355	5,571429	9,419355	16,36667	18,70968	23,86667	27,83871	27,48387	22,93333	18	11,6	9,387097
2014	7,516129	9,285714	14,77419	17,76667	20,58065	25,03333	25,16129	24,09677	22,6	19,29032	13,2	6,516129
2015	7,612903	7,928571	11,67742	15,7	20,96774	25	29,67742	28,41935	20,46667	16,74194	13,66667	8,935484
2016	6,548387	8,62069	11,54839	16,06667	18,41935	23,36667	25,90323	26,3871	24,76667	16,16129	11	9,129032
2017	4,612903	8,607143	14,45161	16,26667	20,77419	26	27,54839	30,22581	20,63333	19,32258	11,4	7,064516
2018	8,741935	5,75	9,548387	19,03333	22,67742	26,1	28,58065	29,51613	25,06667	20,16129	13,2	8,612903
2019	6,645161	11,60714	14,64516	16	16,96774	27,86667	27,80645	28,16129	23,06667	19,12903	11,8	8,83871
2020	7,612903	9,448276	11,19355	17,8	20,19355	22,96667	26,12903	26,87097	23,5	15,54839	12,06667	7,032258

b. Data Curah hujan bulanan rata-rata di Maros

Tahun	JAN	FEB	MAR	APR	MEI	JUN	JUL	AGU	SEP	OKT	NOV	DES
2001	991,88	921,92	756,56	333,01	131,77	209,57	5,65	0,7	172,49	263,34	536,45	1045,06
2002	763,08	400,48	350,11	426,6	222,09	41,16	3,26	0	12,1	7,06	268,78	544,49
2003	940,82	975,77	542,77	232,94	298,76	51,58	39,89	14,3	102,84	113,02	568,91	1484,94
2004	772,79	1085,05	938,24	375,09	136,9	63,24	3,87	152,9	1,29	141,6	619,91	968,75
2005	707,08	517,72	391,23	233,02	75,4	7,2	43,25	3,7	3	332,88	483,5	560,01
2006	742,98	747,19	468,84	326,29	135,95	187,38	3,3	1,7	9,4	0,4	430,1	645,3
2007	803,55	672,57	313,68	280,3	82,31	177,17	9,53	21	36,6	104,63	224,86	878,04
2008	728,74	953,62	403,71	120,78	57,92	89,82	56,7	62,9	33	252,7	493	484,3
2009	1151,8	751,7	261,1	241,7	206	57,9	86,2	12,9	47,7	81,7	284,3	546,6
2010	838,4	494,9	414,6	369,6	569,1	310,9	323,7	164,9	207,2	208	232,6	110,2
2011	92,9	74,3	142	70,4	106,6	20,6	6,8	7,4	18,6	72,2	187	224,2
2012	92,9	337,6	202,3	139,7	123,2	138,5	125,4	12,7	20,7	37	216,2	163,2
2013	239,1	165,9	88,5	241,5	171,1	164,1	191,9	26,7	6,1	38,5	59,5	276,9
2014	151,7	57,1	126,3	159,9	154,8	142,7	71,3	34,8	0,9	1,7	55,1	30,7
2015	121,7	35,1	114,4	240	100,2	145,3	4,7	1,1	1,5	3,2	43,6	226,1
2016	101,9	110,8	124,6	236,4	97,6	29,7	11,5	1,6	22,1	144,9	134,5	89,9
2017	86,9	256	52,1	27,1	192,6	226,4	81,4	17,1	17,2	59,4	63	271,7
2018	287,7	71	94,9	183,7	129,1	134,3	94,1	6,2	1,5	7,1	66,5	70,3
2019	255,2	189,4	234,7	275,6	52,5	101	20,9	2,6	0,9	13	39,2	373,6
2020	598,4	306,1	443,6	318,3	161,9	45,7	35,2	38,9	23,3	132,8	210,3	431,1

c. Data Suhu bulanan rata-rata di Pangkep

TAHUN	JAN	FEB	MAR	APR	MEI	JUN	JUL	AGU	SEP	OKT	NOV	DES
2001	26,74516	27,09286	27,2	27,73667	28,29032	27,11	27,38387	27,87097	28,86	28,22258	26,73333	25,95484
2002	26,09032	26,13214	26,52258	27,10333	27,58065	27,62667	27,35161	27,15484	28,35667	28,86129	28,31333	27,12903
2003	26,50645	26,69286	26,97419	27,35667	27,70968	27,28333	26,7	27,4129	27,9	28,42258	27,51	26,10968
2004	26,94516	26,19655	26,99677	27,82333	27,84839	27,18667	27,20968	26,82258	28,75333	28,57742	28,09	26,85806
2005	26,82581	27,24643	27,39677	27,53667	28,09355	27,91	27,6	28,13548	29,11667	28,65806	27,72667	26,96774
2006	26,68065	26,96786	26,96452	27,26333	27,75806	26,79333	27,0129	27,80968	28,35	28,70323	28,82333	27,44194
2007	27,24194	26,67857	27,33871	27,31333	27,88065	27,41333	27,39677	27,4	27,97333	28,06774	27,24	26,62903
2008	26,64839	26,17241	26,64194	26,83	27,42903	27,25667	27,87097	28,3871	30,1	29,83871	29,3	27,93548
2009	27,35484	27,67857	29,03226	30	30,09677	29,5	28,51613	29,87097	30,53333	30,83871	30,23333	28,83871
2010	27,74194	28,64286	29,41935	29,76667	29,51613	28,9	28,93548	30	30,4	30,29032	30,13333	28,32258
2011	28,32258	28,35714	28,41935	28,2	29,96774	30,06667	29,80645	30,09677	30,83333	31,48387	30,63333	29,03226
2012	28,90323	29,27586	28,70968	30,46667	30,03226	29,3	29,12903	30,03226	31,3	31,90323	31	30,06452
2013	28,6129	29,42857	29,70968	30,56667	30,29032	30,33333	29,35484	30,22581	31,46667	32,06452	30,76667	28,70968
2014	28,03226	28,64286	29,51613	29,73333	30,96774	30,13333	30,03226	30,22581	32	33,19355	31,46667	28,64516
2015	30,06452	31,78571	31,06452	31,73333	32,45161	32,2	32,83871	33,41935	33,73333	35,3871	34,53333	32,12903
2016	33,48387	32,41379	32,93548	31,63333	32,77419	32,63333	31,96774	33,64516	34,46667	33,93548	33,73333	32
2017	31,32258	30,5	31,70968	32,53333	32,41935	30,83333	31,29032	32,19355	33,83333	33,51613	32,7	31,29032
2018	30,09677	30,60714	30,93548	32,06667	32,25806	31,5	31,22581	32,22581	33,76667	34,19355	33,3	31,90323
2019	30,74194	31,35714	30,80645	31,83333	32,19355	30,86667	30,25806	31,45161	32,26667	32,77419	32,8	31,67742
2020	30	30,06897	30,06452	30,46667	30,77419	30,2	30,51613	31,67742	32,93333	32,90323	32,13333	29,87097

d. Data Curah Hujan bulanan rata-rata di Pangkep

Tahun/Bulan	JAN	FEB	MAR	APR	MEI	JUN	JUL	AGU	SEP	OKT	NOV	DES
2001	991,93	921,15	756,51	334,12	132,07	209,48	5,84	0,7	171,66	263,36	534,93	1044,49
2002	763,31	401,53	349,93	426,24	222,42	41,44	3,24	0	12,1	6,97	269,94	543,99
2003	942,21	975,94	542,11	233,65	299,87	51,85	40,21	14,3	101,78	112,77	570,01	1486,31
2004	773,58	1083,48	936,52	373,78	137,01	63,68	3,91	152,9	1,3	141,6	619,92	968,36
2005	708,34	518,19	390,72	232,91	75,36	7,2	43,23	3,7	3	332,67	483,31	560
2006	743,04	747,64	468,8	326,36	135,79	187,4	3,3	1,7	9,4	0,4	430,1	645,4
2007	803,57	672,2	313,7	280,24	82,15	177,08	9,52	21	36,6	104,58	224,89	878,36
2008	729,09	953,72	403,84	120,77	57,91	89,78	59,92	13	4,05	88,8	686,05	825,37
2009	1150,4	872,49	231,45	197,43	138,38	34,73	51,59	1,1	80,6	28,14	168,79	710,93
2010	1129,51	606,7	446,85	261,59	483,74	256,04	204,64	119,59	441,61	309,4	415,27	813,35
2011	794,55	580,28	736,28	502,61	178,29	25,68	1,9	0	0	298,6	374,59	1090,98
2012	657,19	482,99	725,22	153,44	327,2	74,95	84,08	0,8	0,8	147	203,11	501,2
2013	1161,7	497,1	365,33	413,52	145,57	299,27	330,71	10,42	13,2	188,97	301,54	1082,5
2014	970,92	479,1	531,66	733,2	426,06	293,22	52,57	14,69	0	0	240,7	758,1
2015	1148,47	570,15	429,19	303,59	50,48	131,35	0	0	0	10	378,89	872,42
2016	901,95	719,33	333,77	264,9	134,84	195,34	107,75	18,2	132,3	620,93	355,55	668,83
2017	756,97	503,15	512,93	265,87	108,69	176,53	30,75	62,31	123,89	336,91	761,76	996,24
2018	812,14	763,77	718,61	299,96	74,75	148,17	64,43	2	0,7	148,69	418,82	953,41
2019	982,74	342,99	458,23	331,85	49,61	251,66	5,97	0,5	0	18	142,15	345,45
2020	672,68	666,24	349,99	235,01	293,47	39,18	14,32	22,17	35,26	276,7	471,35	1096,9

LAMPIRAN 4. Rincian data Prediktor Global (ENSO,IOD, Monsun)

a. ENSO (*El-Nino Southern Oscillation*)

Tahun	Nino3.4_JAN	Nino3.4_FEB	Nino3.4_MAR	Nino3.4_APR	Nino3.4_MEI	Nino3.4_JUN	Nino3.4_JUL	Nino3.4_AGU	Nino3.4_SEP	Nino3.4_OKT	Nino3.4_NOV	Nino3.4_DES
2001	-0,674614	-0,571822	-0,437944	-0,441614	-0,280153	-0,195907	-6,59E-02	-8,21E-02	-0,243632	-0,194871	-0,415122	-0,445868
2002	-9,96E-02	1,60E-02	5,07E-02	7,14E-02	0,360697	0,709882	0,717169	0,838253	1,05081	1,1967	1,42198	1,33979
2003	0,657457	0,70236	0,407265	-8,82E-02	-0,558322	-0,293247	0,181168	0,226372	0,228067	0,374247	0,287738	0,395872
2004	0,323507	0,293519	0,162837	0,121734	0,117428	0,127823	0,461808	0,731352	0,769247	0,675359	0,611878	0,705701
2005	0,717466	0,419679	0,489867	0,311014	0,357218	3,58E-02	-0,256461	-8,23E-02	-7,78E-02	-0,114861	-0,634643	-0,957638
2006	-0,858123	-0,614051	-0,667955	-0,265875	-3,26E-02	-2,41E-03	-1,73E-02	0,278773	0,555408	0,647118	0,943399	1,10409
2007	0,751427	0,18762	-0,135385	-0,266705	-0,416961	-0,360407	-0,610931	-0,746807	-1,15513	-1,44293	-1,58072	-1,61869
2008	-1,62689	-1,60643	-1,16415	-0,941405	-0,789642	-0,689057	-0,323871	-0,160427	-0,293473	-0,401061	-0,502952	-0,892649
2009	-0,833763	-0,729401	-0,649845	-0,299105	0,111209	0,306802	0,456969	0,531233	0,638857	0,837018	1,41244	1,70897
2010	1,57911	1,3186	0,947136	0,436834	-0,162083	-0,689518	-1,09414	-1,41391	-1,63619	-1,7352	-1,68497	-1,63723
2011	-1,48296	-1,04451	-0,874975	-0,712364	-0,463783	-0,379797	-0,446111	-0,671137	-0,839043	-1,09544	-1,22749	-1,09344
2012	-0,814013	-0,618832	-0,574415	-0,454386	-0,270662	1,34E-02	0,219229	0,434923	0,338777	0,212048	0,108289	-0,293349
2013	-0,468943	-0,456982	-0,208845	-0,197895	-0,340473	-0,429547	-0,412992	-0,408037	-0,218952	-0,250013	-0,188812	-0,208439
2014	0,572116	0,493009	0,526387	0,749174	0,973147	1,17218	1,42962	1,89387	2,16019	2,31119	2,67268	2,63203
2015	-0,445735	-0,569802	-0,246423	0,124174	0,360148	0,208612	-0,103141	-7,18E-02	0,234798	0,377957	0,694978	0,664611
2016	2,62882	2,32301	1,67535	0,965854	0,371218	-2,54E-02	-0,493892	-0,594997	-0,606182	-0,778302	-0,792201	-0,531519
2017	-0,362494	-1,81E-02	8,64E-02	0,265434	0,422038	0,341482	0,244549	-0,174087	-0,464693	-0,608213	-1,00403	-1,02154
2018	-0,927562	-0,727212	-0,763784	-0,465386	-0,147333	4,61E-02	0,110469	7,35E-02	0,435497	0,857379	0,868197	0,853841
2019	0,705167	0,776628	0,854096	0,673935	0,609309	0,446573	0,329789	1,66E-02	-6,18E-03	0,438277	0,478669	0,485521
2020	0,659638	0,426698	0,523695	0,413305	-0,220441	-0,343388	-0,326041	-0,619226	-0,870352	-1,30643	-1,4693	-1,19006

b. IOD (*Indian Ocean Dipole*)

Tahun	Jan	Feb	Mar	Apr	Mei	Jun	Jul	Aug	Sep	Oct	Nov	Des	Jan	Feb
2001	-0,366	0,063	0,09	0,212	0,217	0,241	-0,043	-0,189	-0,117	-0,291	-0,122	0,019	-0,366	0,063
2002	-0,077	-0,018	0,108	-0,277	-0,249	-0,076	-0,164	-0,096	0,392	0,565	0,22	-0,088	-0,077	-0,018
2003	-0,174	0,097	0,061	-0,024	-0,084	0,252	0,228	0,22	0,045	-0,084	-0,036	0,258	-0,174	0,097
2004	0,109	0,194	0,177	-0,005	-0,485	-0,27	-0,204	-0,02	0	0,155	-0,03	-0,063	0,109	0,194
2005	-0,058	-0,48	-0,332	0,16	0,046	-0,062	-0,287	-0,233	-0,428	-0,276	-0,149	-0,23	-0,058	-0,48
2006	-0,07	-0,225	-0,126	0,06	-0,128	0,055	0,137	0,341	0,534	0,736	0,624	0,241	-0,07	-0,225
2007	0,29	0,23	0,216	0,175	0,349	0,144	0,141	0,349	0,341	0,227	0,1	-0,157	0,29	0,23
2008	0,18	0,008	0,197	-0,078	0,258	0,329	0,343	0,237	0,192	0,188	-0,005	0,016	0,18	0,008
2009	0,097	0,243	0,2	0,201	0,336	0,214	-0,095	0,008	0,003	0,147	0,056	0,23	0,097	0,243
2010	0,359	0,103	0,558	0,445	0,05	-0,026	0,096	0,051	-0,162	-0,277	-0,372	-0,142	0,359	0,103
2011	0,257	0,322	0,467	0,229	-0,01	0,169	0,319	0,457	0,308	0,516	0,459	-0,059	0,257	0,322
2012	0,111	0,002	0,126	-0,196	-0,29	0,115	0,643	0,764	0,559	0,27	0,024	0,337	0,111	0,002
2013	0,001	0,269	0,183	-0,222	-0,426	-0,383	-0,083	-0,082	-0,204	-0,009	0,323	0,21	0,001	0,269
2014	-0,036	-0,009	-0,051	0,017	-0,012	0,086	-0,266	-0,26	-0,039	0,3	0,133	0,116	-0,036	-0,009
2015	-0,034	-0,265	-0,141	0,067	0,32	0,41	0,322	0,68	0,4	0,642	0,47	0,341	-0,034	-0,265
2016	0,331	-0,03	0,091	0,222	-0,034	-0,329	-0,661	-0,332	-0,331	-0,212	-0,259	-0,241	0,331	-0,03
2017	-0,02	0,181	0,457	0,574	0,616	0,537	0,617	0,461	0,14	0,175	0,412	0,179	-0,02	0,181
2018	-0,135	0,295	-0,02	-0,008	0,202	0,269	0,15	0,234	0,71	0,844	0,623	0,379	-0,135	0,295
2019	0,452	0,496	0,325	0,333	0,619	0,719	0,693	0,548	0,999	1,123	0,958	0,312	0,452	0,496
2020	0,238	0,134	0,119	0,064	0,378	0,568	0,417	-0,07	-0,084	0,233	0,143	0,1	0,238	0,134

c. Monsun

TAHUN	DESEMBER	JANUARI	FEBRUARI	MARET	APRIL	MEI	JUNI	JULI	AGUSTUS	SEPTEMBER	OKTOBER	NOVEMBER	DESEMBER
2000	2,316	2,111	4,006	1,892	0,8694	1,205	1,959	2,404	2,288	0,68	1,139	1,237	2,316
2001	2,909	2,744	4,155	0,813	0,1417	1,061	2,349	2,435	2,225	0,495	1,432	1,36	2,909
2002	2,811	2,749	3,219	1,469	0,786	1,177	1,828	2,2	2,268	0,752	1,052	1,061	2,811
2003	1,06	2,449	3,718	2,586	1,505	1,128	1,657	2,642	2,067	1,09	0,3949	0,2842	1,06
2004	2,441	2,756	2,761	1,744	1,439	1,747	2,108	2,279	2,416	0,611	1,67	1,901	2,441
2005	1,626	3,903	2,328	2,649	2,384	1,815	1,913	2,737	2,022	1,296	1,052	1,194	1,626
2006	1,491	2,937	2,569	2,832	2,285	1,523	1,65	2,809	2,405	1,13	0,00356	0,1507	1,491
2007	0,456	3,654	4,162	1,521	0,4972	1,067	2,009	2,377	2,215	1,53	0,6874	0,1688	0,456
2008	1,858	3,385	3,239	1,253	0,5239	1,023	1,941	2,475	2,02	0,78	0,3469	0,3308	1,858
2009	2,139	3,513	2,779	1,24	0,313	0,3	1,224	2,345	1,426	0,826	1,01	1,58	2,139
2010	1,562	3,847	3,256	2,207	1,345	0,9781	1,332	2,13	1,756	0,685	0,2273	0,1964	1,562
2011	2,637	2,925	1,729	2,431	2,464	1,94	1,64	1,93	1,815	1,206	0,6885	0,9398	2,637
2012	2,322	3,485	2,435	2,41	2,105	1,674	1,635	2,101	1,911	1,002	0,1597	0,2957	2,322
2013	1,012	3,499	3,329	1,237	0,4169	0,8974	1,916	2,536	1,786	0,843	0,252	0,2344	1,012
2014	1,264	3,766	2,506	2,139	1,57	1,105	1,4	2,287	1,595	0,907	0,7025	0,8615	1,264
2015	1,9	1,825	2,562	2,003	1,425	1,207	1,5	2,028	1,47	0,585	0,04265	0,3215	1,9
2016	2,363	3,401	3,072	2,179	1,573	1,402	1,641	2,062	1,875	1,133	0,4795	0,6457	2,363
2017	2,549	3,211	3,233	2,177	1,453	1,367	1,95	2,754	2,149	0,838	0,1507	0,1104	2,549
2018	2,046	3,349	3,237	1,907	1,096	1,033	1,568	2,282	1,948	0,438	1,035	0,9922	2,046
2019	2,706	3,04	3,576	1,511	0,4548	0,5963	1,269	1,863	1,893	0,901	0,1717	0,008849	2,706
2020	1,17	3,417	2,257	2,441	1,463	1,58	1,197	1,608	1,878	0,788	0,7039	1,082	1,17

Lampiran 5. Script Matlab

a. Model training Maros tahun 2001-2010

```
%calculate persentasi kebenaran model stepwise produksi padi dan
iklim
%halmar halide, hydrometeorologygeophysics dept. fmipa unhas
%data skripsi Deddi
%Maros Training Periode 2001-2010
clear
clf
load marostraining.txt % events, lag-predictors (Suhu, Curah
hujan, Monsun, ENSO, IOD ), 1 output (Pengaruh iklim terhadap
padi)
factors=marostraining(:,1:10); %
produksi=marostraining(:,11); %dibuat pada kolom terakhir
tahun = marostraining (:,12);
mdl = stepwiselm(factors,produksi,'PEnter',0.05)
%exitt
%output
%Linear regression model:
%  y ~ 1 + x10
%
%Estimated Coefficients:
%                    Estimate        SE         tStat       pValue
%                   __________    _________    _______   __________
%
%(Intercept)     1.6598e+05    9480.2        17.508     1.1562e-07
% x10 IOD_JFMA   1.4997e+05     42534         3.526     0.0077778

%Number of observations: 10, Error degrees of freedom: 8
%Root Mean Squared Error: 2.1e+04
%R-squared: 0.608,  Adjusted R-Squared 0.56
%F-statistic vs. constant model: 12.4, p-value = 0.00778
tetapan= 1.6598e+05 ;k_IOD_JFMA= 1.4997e+05 ;

IOD_JFMA =factors(:,10);IOD_JFMAz=IOD_JFMA-
mean(IOD_JFMA)./std(IOD_JFMA);

padi_obs=produksi;
padi_mod=round(tetapan+k_IOD_JFMA.*IOD_JFMA);
[m,n]=size(padi_mod);

figure(1);
plot(tahun,padi_obs,'-ob',tahun,padi_mod,'-r');
%plot(tahun,yo,'-o',tahun,y3,'-r')
title('Periode Training tahun 2001-2010 di Maros');
legend('Data Observasi','Data Model')
% text(2002, 250000,'r = 0.779')
% text(2002, 245000,'RMSE=2.1e+04')
xlabel('Tahun')
ylabel('Produksi padi (ton)')
```

b. Model training Maros tahun 2011-2020

```
%calculate persentasi kebenaran model stepwise produksi padi dan
iklim
%halmar halide, hydrometeorologygeophysics dept. fmipa unhas
%data skripsi Deddi
%Maros Training Periode 2011-2020
clear
clf
load marostraining_2.txt % events, lag-predictors (Suhu, Curah
hujan, Monsun, ENSO, IOD ), 1 output (Pengaruh iklim terhadap
padi)
factors=marostraining_2(:,1:10); %
produksi=marostraining_2(:,11); %dibuat pada kolom terakhir
tahun = marostraining_2 (:,12);
mdl = stepwiselm(factors,produksi,'PEnter',0.05)
%exitt
%output
%Linear regression model:
%  y ~ 1 + x4 + x8
%
%Estimated Coefficients:
%                Estimate        SE         tStat       pValue
%                _________    _________    _______    ________
% (Intercept)     3.2122e+05    22034        14.578    1.7064e-06
% x4 CH_JFMA      -382.89       112.53       -3.4026   0.011402
% x8 ENSO_JFMA     29361         12342        2.3789   0.04896

% Number of observations: 10, Error degrees of freedom: 7
% Root Mean Squared Error: 3.09e+04
% R-squared: 0.67,  Adjusted R-Squared 0.575
% F-statistic vs. constant model: 7.1, p-value = 0.0207
tetapan= 3.2122e+05 ;k_CH_JFMA= -382.89;k_ENSO_JFMA = 29361 ;

CH_JFMA=factors(:,4);CH_JFMAz=CH_JFMA-mean(CH_JFMA)./std(CH_JFMA);
ENSO_JFMA=factors(:,8);ENSO_JFMAz=ENSO_JFMA-
mean(ENSO_JFMA)./std(ENSO_JFMA);

padi_obs=produksi;
padi_mod=round(tetapan+k_CH_JFMA.*CH_JFMA+k_ENSO_JFMA.*ENSO_JFMA);
[m,n]=size(padi_mod);

figure(1);
plot(tahun,padi_obs,'-ob',tahun,padi_mod,'-r');
%plot(tahun,yo,'-o',tahun,y3,'-r')
title('Periode Training tahun 2011-2020 di Maros');
legend('Data Observasi','Data Model')
text(2002, 250000,'r = 0.779')
text(2002, 245000,'RMSE=2.1e+04')
xlabel('Tahun')
ylabel('Produksi padi (ton)')
```

c. Model testing Maros tahun 2001-2010

```
%calculate persentasi kebenaran model stepwise produksi padi dan
iklim
%halmar halide, hydrometeorologygeophysics dept. fmipa unhas
%data skripsi Deddi
%Data Prediksi Padi Maros periode 2001-2010
clear
clf
load prediksimaros.txt % events, lag-predictors (Suhu, Curah
hujan, Monsun, ENSO, IOD ), 1 output (Pengaruh iklim terhadap
padi)
factors=prediksimaros(:,1:10); %
produksi=prediksimaros(:,11); %dibuat pada kolom terakhir
tahun = prediksimaros (:,12);
mdl = stepwiselm(factors,produksi,'PEnter',0.05)

%exitt
%output
%Linear regression model:
%  y ~ 1 + x4 + x8
%
%Estimated Coefficients:
%                    Estimate        SE          tStat       pValue
%                   __________    _________    _______
__________
%
% (Intercept)       2.9122e+05     15191       19.171     5.6798e-
08
% x10 IOD_JFMA     -2.1368e+05     68154       -3.1352    0.013906

% Number of observations: 10, Error degrees of freedom: 8
% Root Mean Squared Error: 3.37e+04
% R-squared: 0.551,  Adjusted R-Squared 0.495
% F-statistic vs. constant model: 9.83, p-value = 0.0139
tetapan=  2.9122e+05 ;k_IOD_JFMA= -2.1368e+05 ;

IOD_JFMA =factors(:,10);IOD_JFMAz=IOD_JFMA-
mean(IOD_JFMA)./std(IOD_JFMA);

padi_obs=produksi;
padi_mod=round(tetapan+k_IOD_JFMA.*IOD_JFMA);
[m,n]=size(padi_mod);


figure(1);
plot(tahun,padi_obs,'-ob',tahun,padi_mod,'-r');
%plot(tahun,yo,'-o',tahun,y3,'-r')
% axis([2001 2021 206995.000000000000  180298]);
title('Model Testing Maros periode 2011-2020');
legend('Data Observasi','Data Prediksi')
text(2012, 350000,'r = 0.818')
text(2012, 340000,'RMSE=3.09e+04')
xlabel('Tahun')
ylabel('Produksi padi (ton)')
```

d. Model testing Maros tahun 2011-2020

```
%calculate persentasi kebenaran model stepwise produksi padi dan
iklim
%halmar halide, hydrometeorologygeophysics dept. fmipa unhas
%data skripsi Deddi
%Maros Testing Periode 2011-2020
clear
clf
load marostesting.txt % events, lag-predictors (Suhu, Curah hujan,
Monsun, ENSO, IOD ), 1 output (Pengaruh iklim terhadap padi)
factors=marostesting(:,1:10); %
produksi=marostesting(:,11); %dibuat pada kolom terakhir
tahun = marostesting (:,12);
mdl = stepwiselm(factors,produksi,'PEnter',0.05)

%exitt
%output
%Linear regression model:
%  y ~ 1 + x10
%
%Estimated Coefficients:
%                    Estimate        SE         tStat       pValue
%
_________
%
%   (Intercept)     1.6598e+05    9480.2        17.508
1.1562e-07
%   x10 IOD_JFMA    1.4997e+05     42534         3.526
0.0077778

%Number of observations: 10, Error degrees of freedom: 8
%Root Mean Squared Error: 2.1e+04
%R-squared: 0.608,  Adjusted R-Squared 0.56
%F-statistic vs. constant model: 12.4, p-value = 0.00778
tetapan= 1.6598e+05 ;k_IOD_JFMA= 1.4997e+05 ;

IOD_JFMA =factors(:,10);IOD_JFMAz=IOD_JFMA-
mean(IOD_JFMA)./std(IOD_JFMA);

padi_obs=produksi;
padi_mod=round(tetapan+k_IOD_JFMA.*IOD_JFMA);
[m,n]=size(padi_mod);

figure(1);
plot(tahun,padi_obs,'-ob',tahun,padi_mod,'-r');
%plot(tahun,yo,'-o',tahun,y3,'-r')
% axis([2001 2021 206995.00000000000  180298]);
title('Periode Testing tahun 2011-2020 di Maros');
legend('Data Observasi','Data Model')
text(2002, 250000,'r = 0.779')
text(2002, 245000,'RMSE=2.1e+04')
xlabel('Tahun')
ylabel('Produksi padi (ton)')
```

e. Hasil Testing keseluruhan tahun 2011-2020 di Maros

```
%calculate persentasi kebenaran model stepwise produksi padi dan
iklim
%halmar halide, hydrometeorologygeophysics dept. fmipa unhas
%data skripsi Deddi
%Grafik hasil testing Maros tahun 2001-2020
clear
clf
load mtestingvstraining.txt % events, lag-predictors (Suhu, Curah
hujan, Monsun, ENSO, IOD ), 1 output (Pengaruh iklim terhadap
padi)
observasi =mtestingvstraining(:,1)
prediksi=mtestingvstraining(:,2)
tahun = mtestingvstraining (:,3)%dibuat pada kolom terakhir
mdl = stepwiselm(observasi,prediksi,'PEnter',0.05) %Fit Linear
Model Using Stepwise Regression
r= corr (observasi,prediksi)

figure(1);
plot(tahun,observasi,'-ob',tahun,prediksi,'-r');
%plot(tahun,yo,'-o',tahun,y3,'-r')
% axis([2001 2021 206995.00000000000  205578.1996596480000]);
title('Grafik hasil Testing tahun 2001-2020 di Maros');
legend('Data Observasi','Data prediksi')
text(2001, 380000,'r = 0.836')
text(2001, 365000,'RMSE = 2.35e+04')
xlabel('Tahun')
ylabel('Produksi padi (ton)')
```

f. Model Training Pangkep tahun 2001-2010

```
%calculate persentasi kebenaran model stepwise produksi padi dan
iklim

%halmar halide, hydrometeorologygeophysics dept. fmipa unhas
%data skripsi Deddi
%Data training periode tahun 2001-2010 di Pangkep
clear
clf
load Pangkeptraining.txt % events, lag-predictors (Suhu, Curah
hujan, Monsun, ENSO, IOD ), 1 output (Pengaruh iklim terhadap
produksi padi)
factors=Pangkeptraining(:,1:10); %
produksi=Pangkeptraining(:,11); %dibuat pada kolom terakhir
tahun = Pangkeptraining (:,12);
mdl = stepwiselm(factors,produksi,'PEnter',0.05)
%exitt
%output
%Linear regression model:
%  y ~ 1 + x10
%
%Estimated Coefficients:
%                    Estimate        SE         tStat       pValue
%                   __________    _________    _______
_________
%
%(Intercept)          96634         5792.4      16.683
1.6856e-07
% x10 IOD_JFMA        73032         25988        2.8102
0.022837
%Number of observations: 10, Error degrees of freedom: 8
%Root Mean Squared Error: 1.29e+04
%R-squared: 0.497,  Adjusted R-Squared 0.434
%F-statistic vs. constant model: 7.9, p-value = 0.0228
tetapan= 96634 ;k_IOD_JFMA= 73032 ;

IOD_JFMA =factors(:,10);IOD_JFMAz=IOD_JFMA-
mean(IOD_JFMA)./std(IOD_JFMA);

padi_obs=produksi;
padi_mod=round(tetapan+k_IOD_JFMA.*IOD_JFMA);
[m,n]=size(padi_mod);

figure(1);
plot(tahun,padi_obs,'-ob',tahun,padi_mod,'-r');
%plot(tahun,yo,'-o',tahun,y3,'-r')
% axis([2001 2021 206995.00000000000  205578.19965964800000]);
title('Data training periode tahun 2001-2010 di Pangkep');
legend('Data Observasi','Data Model')
text(2002, 132000,'r = 0.704')
text(2002, 130000,'RMSE=1.29e+04')
xlabel('Tahun')
ylabel('Produksi padi (ton)')
```

g. Model Training Pangkep tahun 2011-2020

```
%calculate persentasi kebenaran model stepwise produksi padi dan
iklim
%halmar halide, hydrometeorologygeophysics dept. fmipa unhas
%data skripsi Deddi
clear
clf
load Pangkeptraining2.txt % events, lag-predictors (Suhu, Curah
hujan, Monsun, ENSO, IOD ), 1 output (Pengaruh iklim terhadap
produksi padi)
factors=Pangkeptraining2(:,1:10); %
produksi=Pangkeptraining2(:,11); %dibuat pada kolom terakhir
tahun = Pangkeptraining2 (:,12);
mdl = stepwiselm(factors,produksi,'PEnter',0.05)
%exitt
%output
%Linear regression model:
%  y ~ 1 + x10
%
%Estimated Coefficients:
%                    Estimate        SE          tStat       pValue
%                   __________    _________    _______
__________
%
%(Intercept)          1.5065e+05     4748       31.73
1.0595e-09
% x10 IOD_JFMA        -54170         17361     -3.1201
0.014226

%Number of observations: 10, Error degrees of freedom: 8
%Root Mean Squared Error: 8.49e+03
%R-squared: 0.549,  Adjusted R-Squared 0.493
%F-statistic vs. constant model: 9.74, p-value = 0.0142
tetapan= 1.5065e+05 ;k_IOD_JFMA= -54170 ;

IOD_JFMA =factors(:,10);IOD_JFMAz=IOD_JFMA-
mean(IOD_JFMA)./std(IOD_JFMA);

padi_obs=produksi;
padi_mod=round(tetapan+k_IOD_JFMA.*IOD_JFMA);
[m,n]=size(padi_mod);

figure(1);
plot(tahun,padi_obs,'-ob',tahun,padi_mod,'-r');
%plot(tahun,yo,'-o',tahun,y3,'-r')
% axis([2001 2021 206995.00000000000  205578.1996596480000]);
title('Data training periode tahun 2001-2010 di Pangkep');
legend('Data Observasi','Data Model')
text(2002, 132000,'r = 0.740')
text(2002, 130000,'RMSE=8.49e+03')
xlabel('Tahun')
ylabel('Produksi padi (ton)')
```

h. Model Testing Pangkep tahun 2001-2010

```
%calculate persentasi kebenaran model stepwise produksi padi dan
iklim
%halmar halide, hydrometeorologygeophysics dept. fmipa unhas
%data skripsi Deddi
%Periode testing Pangkep tahun 2011-2020
clear
clf
load pangkeptesting.txt % events, lag-predictors (Suhu, Curah
hujan, Monsun, ENSO, IOD ), 1 output (Pengaruh iklim terhadap
padi)
factors=pangkeptesting(:,1:10); %
produksi=pangkeptesting(:,11); %dibuat pada kolom terakhir
tahun = pangkeptesting (:,12);
mdl = stepwiselm(factors,produksi,'PEnter',0.05)
%exitt
%output
%Linear regression model:
%  y ~ 1 + x10
%
%Estimated Coefficients:
%                    Estimate        SE         tStat       pValue
%                   __________    _________    _______
__________
%
%(Intercept)         96634         5792.4      16.683
1.6856e-07
% x10 IOD_JFMA       73032         25988        2.8102
0.022837
%Number of observations: 10, Error degrees of freedom: 8
%Root Mean Squared Error: 1.29e+04
%R-squared: 0.497,  Adjusted R-Squared 0.434
%F-statistic vs. constant model: 7.9, p-value = 0.0228
tetapan= 96634 ;k_IOD_JFMA= 73032 ;

IOD_JFMA =factors(:,10);IOD_JFMAz=IOD_JFMA-
mean(IOD_JFMA)./std(IOD_JFMA);

padi_obs=produksi;
padi_mod=round(tetapan+k_IOD_JFMA.*IOD_JFMA);
[m,n]=size(padi_mod);
```

i. Model Testing Pangkep tahun 2011-2020

```
%calculate persentasi kebenaran model stepwise produksi padi dan
iklim
%halmar halide, hydrometeorologygeophysics dept. fmipa unhas
%data skripsi Deddi
%Periode testing Pangkep tahun 2011-2020
clear
clf
load pangkeptesting2.txt % events, lag-predictors (Suhu, Curah
hujan, Monsun, ENSO, IOD ), 1 output (Pengaruh iklim terhadap
padi)
factors=pangkeptesting2(:,1:10); %
produksi=pangkeptesting2(:,11); %dibuat pada kolom terakhir
tahun = pangkeptesting2 (:,12);
mdl = stepwiselm(factors,produksi,'PEnter',0.05)
%exitt
%output
%Linear regression model:
%  y ~ 1 + x10
%
%Estimated Coefficients:
%                    Estimate        SE         tStat       pValue
%                   __________    _________    _______
__________
%
%(Intercept)         1.3843e+05    2793        49.564     2.7788e-
12
% x10 IOD_JFMA       73032         25988        2.8102
0.022837

%Number of observations: 10, Error degrees of freedom: 8
%Root Mean Squared Error: 8.49e+03
%R-squared: 0.549,  Adjusted R-Squared 0.493
%F-statistic vs. constant model: 9.74, p-value = 0.0142
tetapan= 1.3843e+05 ;k_IOD_JFMA= 73032 ;

IOD_JFMA =factors(:,10);IOD_JFMAz=IOD_JFMA-
mean(IOD_JFMA)./std(IOD_JFMA);

padi_obs=produksi;
padi_mod=round(tetapan+k_IOD_JFMA.*IOD_JFMA);
[m,n]=size(padi_mod);
```

j. Hasil Testing keseluruhan tahun 2011-2020 di Pangkep

```
%calculate persentasi kebenaran model stepwise produksi padi dan
iklim
%halmar halide, hydrometeorologygeophysics dept. fmipa unhas
%data skripsi Deddi
%model fitting Pangkep tahun 2001-2020
clear
clf
load ptestingvstraining.txt % events, lag-predictors (Suhu, Curah
hujan, Monsun, ENSO, IOD ), 1 output (Pengaruh iklim terhadap
padi)
observasi=ptestingvstraining(:,1);
prediksi=ptestingvstraining(:,2);
tahun = ptestingvstraining (:,3);
mdl = stepwiselm(observasi,prediksi,'PEnter',0.05) %Fit Linear
Model Using Stepwise Regression
r = corr (observasi,prediksi)

figure(1);
plot(tahun,observasi,'-ob',tahun,prediksi,'-r');
%plot(tahun,yo,'-o',tahun,y3,'-r')
% axis([2001 2021 206995.00000000000  205578.1996596480000]);
title('Grafik hasil Testing tahun 2001-2020 di Pangkep');
legend('Data observasi','Data prediksi')
text(2001, 157000,'r =  0.798')
text(2001, 153000,'RMSE= 1.12e+04')
xlabel('Tahun')
ylabel('Produksi padi (ton)')
```

Lampiran 4. Prosedur Stepwise berdasarkan Matlab 2017a

a. Maros

Menggunakan perintah :

mdl= stepwisefit (factors,produksi)

hasilnya :

Number of observations: 20, Error degrees of freedom: 18

Root Mean Squared Error: 2.14e+04

R-squared: 0.804, Adjusted R-Squared 0.793

F-statistic vs. constant model: 73.6, p-value = 8.91e-08

Initial columns included: none

Step 1, added column 2, p=0.000339306

Final columns included: 2

'Coeff'	'Std.Err.'	'Status'	'P'
[-1.6137e+03]	[2.7923e+03]	'Out'	[0.5709]
[-4.6456e+03]	[1.0539e+03]	'In'	[3.3931e-04]
[-71.4600]	[94.9785]	'Out'	[0.4621]
[-88.5631]	[51.2171]	'Out'	[0.1019]
[-1.8761e+04]	[2.7606e+04]	'Out'	[0.5059]
[-1.0612e+04]	[3.2787e+04]	'Out'	[0.7501]
[2.4300e+03]	[8.8540e+03]	'Out'	[0.7870]
[8.3879e+03]	[1.1422e+04]	'Out'	[0.4727]
[-2.2987e+04]	[3.0041e+04]	'Out'	[0.4546]
[-4.5408e+04]	[5.9054e+04]	'Out'	[0.4525]

b. Pangkep

Menggunakan perintah :

mdl= stepwisefit (factors,produksi)

hasilnya :

Number of observations: 20, Error degrees of freedom: 18

Root Mean Squared Error: 9.05e+03

R-squared: 0.776, Adjusted R-Squared 0.763

F-statistic vs. constant model: 62.3, p-value = 2.98e-07

Initial columns included: none

Step 1, added column 1, p=1.70113e-05

Final columns included: 1

'Coeff'	'Std.Err.'	'Status'	'P'
[7.7607e+03]	[1.3380e+03]	'In'	[1.7011e-05]
[-1.6404e+03]	[4.7850e+03]	'Out'	[0.7359]
[0]	[6.0013e+03]	'Out'	[1]
[-1.6404e+03]	[4.7850e+03]	'Out'	[0.7359]
[-1.2017e+04]	[9.1211e+03]	'Out'	[0.2051]
[-8.9160e+03]	[1.1093e+04]	'Out'	[0.4326]
[-2.3207e+03]	[3.0417e+03]	'Out'	[0.4559]
[-1.7655e+03]	[4.0320e+03]	'Out'	[0.6670]
[-1.4704e+04]	[1.0462e+04]	'Out'	[0.1779]
[3.9500e+03]	[1.9095e+04]	'Out'	[0.8386]

Lampiran 5. Nilai Pengaruh Semua Variabel Prediktor

a. Maros

Variabel	Koefisien	Standar Eror	tStat	pValue
(X1) Suhu_SOND	-1.6137e+03	2.7923e+03	-0.19712	0.5709
(X2) Suhu_JFMA	-4.6456e+03	1.0539e+03	-4.4081	3.3931e-04
(X3) CH_SOND	-71.4600	94.9785	0.36819	0.4621
(X4) CH_JFMA	-88.5631	51.2171	-2.0703	0.1019
(X5) Monsun_SOND	-1.8761e+04	2.7606e+04	-1.0145	0.5059
(X6) Monsun_JFMA	-1.0612e+04	3.2787e+04	-0.77214	0.7501
(X7) ENSO_SOND	2.4300e+03	8.8540e+03	1.0201	0.7870
(X8) ENSO_JFMA	8.3879e+03	1.1422e+04	0.075114	0.4727
(X9) IOD_SOND	-2.2987e+04	3.0041e+04	-1.5689	0.4546
(X10) IOD_JFMA	-4.5408e+04	5.9054e+04	0.72234	0.4525

b. Pangkep

Variabel	Koefisien	Standar Eror	tStat	pValue
(X1) Suhu_SOND	7760.7	1.3380e+03	5.8002	1.7011e-05
(X2) Suhu_JFMA	-1.6404e+03	4.7850e+03	-	0.7359
(X3) CH_SOND	0	6.0013e+03	-	1
(X4) CH_JFMA	-1.6404e+03	4.7850e+03	0.0140028	0.7359
(X5) Monsun_SOND	-1.2017e+04	9.1211e+03	-2.2996	0.2051
(X6) Monsun_JFMA	-8.9160e+03	1.1093e+04	-1.3545	0.4326
(X7) ENSO_SOND	-2.3207e+03	3.0417e+03	0.16375	0.4559
(X8) ENSO_JFMA	-1.7655e+03	4.0320e+03	-1.0727	0.6670
(X9) IOD_SOND	-1.4704e+04	1.0462e+04	-2.0003	0.1779
(X10) IOD_JFMA	3.9500e+03	1.9095e+04	0.34081	0.8386